

Achieving Common Leadership and Infrastructure through the Program Management Office

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Introduction

The Program Management Office (PMO) is an innovative approach for providing leadership and infrastructure for managing and controlling multiple, complex product development programs in order to improve time-to-market and profitability results. Understanding and characterizing the operation of the PMO provides the ability to utilize a systematic approach for managing diverse teams and programs, standardizing tools and processes, centralizing coordination and control, and providing for ease of access to program-related information. Knowledge of the PMO concept and approach will be useful to general management, managers responsible for product development, and program and project managers.

PMO is currently a popular acronym being used across industry has that been broadly interpreted and many times, misunderstood. Under our definition, PMO represents a compilation of product development best practices that have been melded into an integrated approach targeted at improving business results. It can manifest itself within a wide spectrum of implementations ranging from an informal Community of Practice to a comprehensive and formally structured PMO. The appropriate implementation of the PMO will be dependent upon the objectives, complexity and culture of the intended firm.

In the paper, "[Program Management: Linking Business Strategy to Product and IT Development](#)"¹, we discussed program management as a proven discipline which effectively links multiple project outputs to strategic business objectives. In this article, we will explain in greater depth how this can be accomplished when the environment is predominantly characterized by a number of simultaneous, complex and/or distributed programs. PMO implementation is a sufficiently large topic that we will not be able to address in this article. In order to distinguish between what has been commonly referred to as a "Project" Management Office as compared to a "Program" Management Office, please refer to our recent article in this series entitled, "[Program and Project Management: Understanding the Differences](#)"².

The Need for a PMO

PMO's are currently used across a wide array of organizations and industries for coordinating various types of programs and projects. Generally, a formal PMO is more cost-effective for

larger firms and is especially beneficial for companies with geographically distributed sites and teams. Single-site organizations, or those with a limited number of new product development programs, may not warrant the need for a comprehensive and formal PMO. For these organizations, an informal PMO can be established in the form of a Community of Practice (sometimes called a Program Management Forum). Within our companies, both formal and informal PMO's have been established. Tektronix has created a formal, company-wide PMO that has been implemented globally. Intel has several formal division-level PMO's in addition to a Program Management Community of Practice that serves as an informal PMO across the corporation.

The impetus for the creation of a PMO most often originates out of the need for continual improvement in achievement of business objectives caused by major change within the organization. This could be fueled by such things as a firm's rapid growth, mergers and acquisitions, or de-centralization of operations to name a few. Changes such as these may yield a greater number of programs, larger programs, increased complexity due to design and team structure, and co-development efforts involving multiple geographical sites. These changes, although strategically important to the firm, may create challenges to achievement of business objectives, to consistency in program performance, and to maintenance of proper coordination and control of activities. These challenges become even greater as growth occurs internationally, adding language, culture and time zone barriers. If these challenges and barriers are not properly addressed, they may result in a firm's inability to manage and control product development efforts, leading to adverse impacts on new product launches, market share and profitability.

Why Tektronix Implemented a PMO

Tektronix, Inc, a global Test and Measurement company within the high tech industry, has installed a worldwide PMO to oversee all product development and program management activities. During the past few years, Tektronix has grown its product and technical capabilities through several company acquisitions - many of which were internationally based companies. Each acquired business had its own unique product development processes and tools, many of which were only partially compatible with the new parent company. Tektronix's normal acquisition integration process addressed most of the incompatibility issues; however several communication, coordination and control challenges remained. The resulting inefficiencies tended to adversely impact the company's ability to consistently achieve its business objectives. The solution was to consolidate responsibility for all worldwide product development programs, and to provide management and control through a central PMO located at the company's headquarters in Beaverton, Oregon. The PMO has driven standardization of development processes and tools that contribute to improved communication and consistency of performance, and continues to evolve and develop as improvements and best practices are identified. The PMO has been credited with improving team performance, and contributing to the company's ability to achieve its business and operational objectives. As an added benefit, the company has derived a cohesive worldwide team of trained, capable and experienced product development program managers.

The PMO and the Organizational Structure

The PMO is an operational entity with established roles and responsibilities managed by a senior level manager or director who is responsible for all program-related product development efforts. The PMO should reside at the same level of the organization as other key functions (e.g. Engineering, Marketing, Finance, etc.). Figure 1 demonstrates an example of how the PMO fits into a matrix organizational structure which is very common in high-technology companies today.

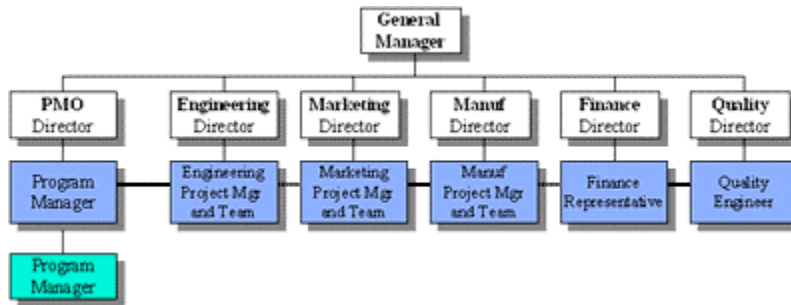


Figure 1: Example Matrix Structure with a PMO

The PMO director is ultimately responsible for the success of all the programs within the organization, as well as consistent use of program processes, tools, reporting metrics and status indicators.

Program managers report to the PMO director, either directly or through a matrix organizational structure and are directly responsible for the successful execution of their program(s) from product idea generation through the product's eventual launch into the market. Each program manager leads a team of project managers, engineers and other functional personnel who implement the completion of the product development effort.

The PMO span of control includes operational responsibility for program performance, including progress reporting to senior management, accomplishment of deliverables for all product development programs, and career growth and capability development of the program managers.

Characteristics of the PMO

There are several characteristics of the PMO that are important to note. The most important characteristic is that all elements necessary for successfully managing programs in a product development environment are centrally managed, coordinated and integrated into a systemized approach. This provides for unified coordination and control while enhancing communication across all participating organizations, functions, physical sites and time zones. Figure 2 illustrates the eight key elements necessary for an effective PMO.

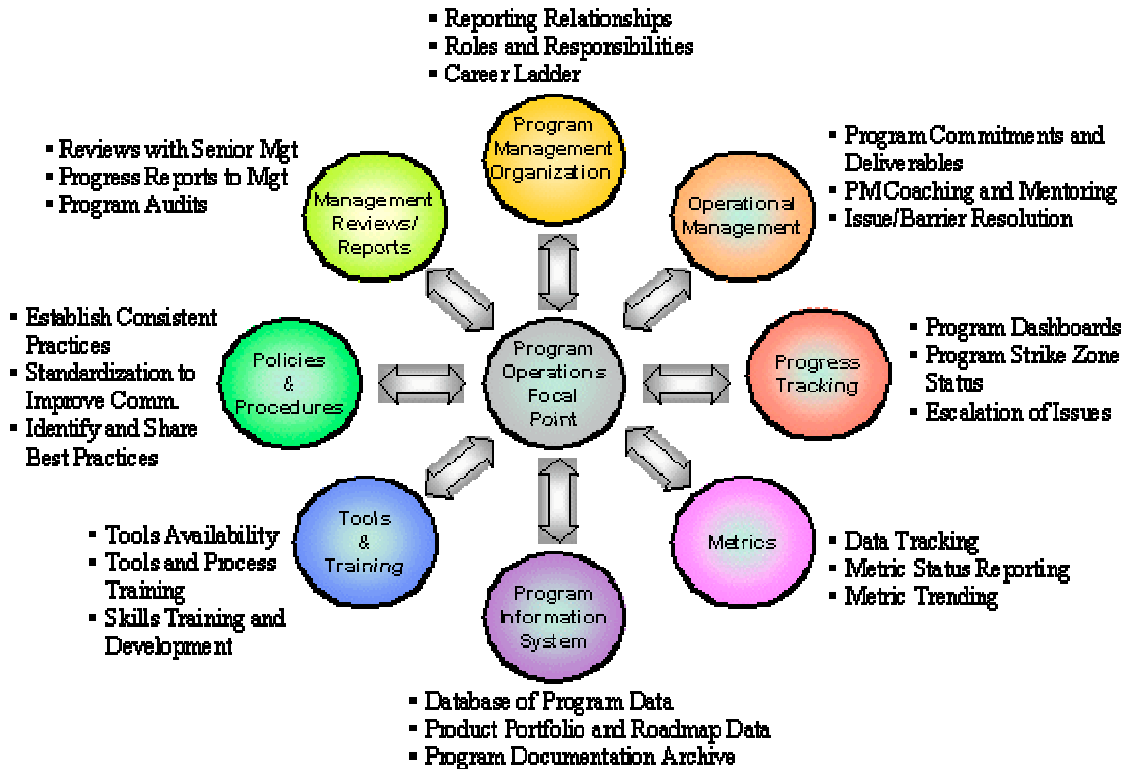


Figure 2: Key Elements of an Effective PMO

The PMO establishes consistent implementation and practice of key business processes across the organization. Process consistency provides improved predictability of performance on all programs and aids in the adoption of a common language for all product development efforts. Productivity gains will also be achieved as program teams become more experienced in process execution and as cross-site development efforts utilize common methods. Common processes also help to achieve productivity gains as learning curves decrease and expertise in process execution increases on each new generation of product development programs.

The PMO provides an organized and structured approach for periodic senior management review of all programs. Consistency in reporting methods, metrics and information is established across all programs. A coordinated approach to program reviews creates an excellent means for rapid elevation of program-related issues and barriers to senior management. Also, new tools have evolved in the high-tech industry to more adequately monitor and control progress of programs within the simultaneous, multi-program environment. These tools include dashboard reporting and summary status indicators for management's assessment of product development status, issues, and barriers. These tools are necessary for senior management to have accurate and timely information to efficiently manage and make decisions. Mechanisms are also now in place for negotiating and setting management boundary conditions for individual programs (See article in this series entitled, ["The Program Strike Zone: Beyond the Bounding Box"](#))³.

The PMO also creates a learning environment through the alignment of all product development teams under the same leadership, development philosophies and practices. Program managers

and teams master their skills as they communicate and coordinate programs together in this structure. Along with this, an integrated program information database can be established that contains product roadmaps, product proposals, milestone documentation, and best practices. At Tektronix, a considerable amount of on-line program management training documentation, including guidelines for managing programs in a worldwide distributed environment, is collected.

Benefits of the PMO

There are several key benefits derived from the appropriate use of a PMO to increase the probability of successfully achieving a firm's business objectives. The benefits include:

- Enhanced communication through central program coordination across organizations, functions and sites
- Consistent definition and application of program management roles, responsibilities and accountabilities
- Increased probability of successful implementation of the product portfolio by effective balancing of the product roadmap with organizational resources
- Systematic approach for managing diverse teams across a distributed global environment
- Structured process for elevation and resolution of significant program barriers and issues
- Empowered decision-making on the part of the program managers through negotiation and agreement with senior management
- Improved productivity through the standard use of processes and tools on all programs

Conclusion

The Program Management Office (PMO) is an innovative approach for providing leadership and infrastructure for managing and controlling multiple, complex product development programs. The PMO provides the ability for an organization to successfully manage and coordinate scarce resources, consistently track product development program progress, ensure that deliverables are completed correctly and on time, and that senior management is receiving relevant and consistent information for decision making and running the business.

PMO's are currently used in many organizations for managing various types of programs and are generally more cost-effective for larger firms due to economies of scale. Smaller organizations that either cannot afford or justify the formal PMO will benefit from an informal approach that provides some of the elements of the formal PMO. Because of the PMO's significant potential to positively impact business results, it is important for senior management and managers responsible for product development to understand the benefits and use of this concept and process.

References

1. [PM World Today](#) Volume V Issue 7, September-October 2003
2. [PM World Today](#), Volume VI Issue 3, May-June 2004
3. [PM World Today](#), Volume VI Issue 1, March-April 2004

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